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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/781,682	02/12/2001	Robert F. Kovar	48997 (70184)	6125

7590 07/01/2002

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EXAMINER

MCCLENDON, SANZA L

ART UNIT	PAPER NUMBER
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1711

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DATE MAILED: 07/01/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

MEV

<b>Office Action Summary</b>	Applicati n N .	Applicant(s)	
	09/781,682	KOVAR ET AL.	
	Examin r	Art Unit	
	Sanza L McClendon	1711	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 February 2001 .
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-73 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 20-39 and 41-73 is/are rejected.
- 7) ☐ Claim(s) 8-19 and 40 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☐ All b) ☐ Some \* c) ☐ None of:  
 1. ☐ Certified copies of the priority documents have been received.  
 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
 \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>4</u> . | 6) <input type="checkbox"/> Other: _____                                    |

DETAILED ACTION

*Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 14, 43 and 73 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 73 recites the broad recitation organic filler, inorganic filler, or blends thereof, and the claim also recites Ni coated carbon powder, iron powder, carbon black, and Thiokol blue which is the narrower statement of the range/limitation.

Art Unit: 1711

4. Claims 14 and 43 contain the trademark/trade names CN985-B88, CN963-B80, CN965-A80, CN966-J75; Sartomer CN381; Sartomer CN384 and Sartomer CN386. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, -second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe polyurethanes and co-initiators and, accordingly, the identification/description is indefinite.

#### *Claim Objections*

5. Claim 19 is objected to because of the following informalities: the acronym HMDI should be spelled out clearly, such as the acronyms in claim 21. Appropriate correction is required.

#### *Claim Rejections - 35 USC § 102*

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-7, 20-21, 24-36, 41-42, 45-46, 54, 56-58, 67-73 are rejected under 35 U.S.C. 102(b) as being anticipated by Kovar et al (5,977,269).

Art Unit: 1711

Kovar et al teaches polyester, vinyl dioxolane based coating compositions that are VOC free and sprayable onto substrates and cured. Said composition comprises (a) at least one prepolymer that is the reaction product of (I) at least one substituted vinyl dioxolane of formula I and (ii) at least one ester of a polycarboxylic acid; and (b) a catalyst system to initiate the prepolymer reaction of (a). Said catalyst system comprises a cobalt/aluminium/zinc system. Said composition further comprises peroxide and a solubility enhancer. Said peroxide is known to initiate in thermal and ionizing radiation. The solubility enhancer is a tertiary amine compound, which are well known as co-initiators in free-radically polymerized systems. The peroxide is added in amounts from 0.10 to 5 weight percent and said enhancer from 0.01 to 1.0 weight percent. The vinyl dioxolanes can include compounds of formula I, such as HMVD and HBVD found in column 10, line 68. The esters of polycarboxylic acids can be found in column 11, lines 27-35. The composition can comprise a reactive diluent to adjust the viscosity of the composition to make it sprayable. Said reactive diluents can have vinyl dioxolane groups or compounds such as trimethylolpropane triacrylate can be used. Further still, the composition can comprise pigments, such as metal oxides-see column 14, lines 15-18. Additionally other additives, such as surface acting agents can be added. This anticipates wetting agents.

*Claim Rejections - 35 USC § 103*

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the

Art Unit: 1711

art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 1-7, 20-39, 41-54, 56-73 rejected under 35 U.S.C. 103(a) as being unpatentable over Kovar et al (5,977,269).

Kovar et al is described in the above rejection. Kovar et al does not expressly teach adding photoinitiators as suggested by applicant's claims 22-26, 43, and 59-66, however it is well known that vinyl groups as taught by Kovar et al and applicant are free-radically polymerizable in the presence of photoactive free radical initiators, such as those named by applicant. In addition, the photoinitiators and co-initiators of applicant's invention are well known as well as commercially available. There is no evidence that the addition of the photoinitiators of applicant's invention will distinguish the invention over the prior art; considering that Kovar et al teaches the use of peroxides as initiators, wherein peroxides are also radiation activatable. Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to add photoinitiators as taught by applicant to initiate polymerisation in the presence of radiation to obtain a faster cure mechanism for the VOC free coating compositions as taught by Kovar et al with the expectation of adequate success in the absence of evidence to the contrary.

It is noted that Kovar et al does not expressly teach the different weight percentages as claimed by applicant. However, applicant fails to establish the criticality of such percentages and the examiner believes that any percentages could have been used since the composition would have equally as well with any type of percentages.

It is noted that Kovar et al does not teach the addition of auxiliary additives, such as coupling agents and thixotropic agents, such as fumed silica. However, Kovar et al teaches that common ingredients can be used in the compositions in manners and

Art Unit: 1711

proportions well known in the art. However, applicant fails to establish the criticality of such additives and the examiner believes that any additives could have been used to tailor the composition to the purpose for use, such as strong adhesive compositions, thick compositions, or pigmented compositions.

### *Allowable Subject Matter*

10. Claims 8-19, 40, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. The following is a statement of reasons for the indication of allowable subject matter: the prior art fails to teach a radiation curable composition containing essentially no VOC comprising; at least one vinyl dioxolane end-capped oligomer comprising a polyurethane and at least one photoinitiator to initiate polymerization of said oligomer. Nor does the prior art teach that said vinyl dioxolane-polyurethane oligomer derived from the components of claims 9-19 and 40.

### *Conclusion*

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. 6,150,429 to Kovar et al teaches polyester/vinyl dioxolane-based coating compositions.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sanza L McClendon whose telephone number is (703) 305-0505. The examiner can normally be reached on Monday through Friday 8:00 to 4:30.

Art Unit: 1711

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (703) 308-2462. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0657.

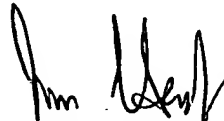
Sanza L McClendon

Examiner

Art Unit 1711

SMc

June 28, 2002



James J. Seidleck  
Supervisory Patent Examiner  
Technology Center 1700